# Liquid Waste Program 2011 Stakeholder Outreach Initiative Summary of, and Responses to, Stakeholder Recommendations December 12, 2011

The New Mexico Environment Department (NMED), Liquid Waste Program initiated an outreach effort to obtain stakeholder recommendations on how to improve the program. The department distributed public notices on its website and by paper copy at each Field Office, and issued a statewide news release announcing public meetings and the opportunity to submit written comments. Notices also were sent to stakeholder organizations for distribution to their members. A total of 20 public meetings were held in Alamogordo, Angel Fire, Carlsbad, Clayton, Clovis, Espanola, Farmington, Hobbs, Las Cruces, Las Vegas, Los Lunas, Moriarty, Rio Rancho, Roswell, Ruidoso, Silver City, Santa Fe, Socorro, Taos, and Tucumcari. Meeting attendance, excluding NMED staff, ranged from zero in Las Vegas and Tucumcari, to approximately 40 in Farmington. Attendees included homeowners, contractors, realtors and local government officials, including several elected officials. Additionally, written comments were received from 11 individuals, 4 organizations, and several NMED staff members.

This document summarizes the recommendations that were received from stakeholders. In the following discussion, the Liquid Waste Regulations, 20.7.3 NMAC, will be referenced only by section and subsection (eg. 904 or 201.L).

NMED's comments, on issues where the department has developed a position, are provided in **green font**. These comments are offered for the purpose of continuing discussion with stakeholders, and do not necessarily reflect what will eventually be incorporated into NMED's petition for regulation amendments.

#### General Suggestions

- A number of stakeholders felt that some requirements in the Liquid Waste
  Program are overly prescriptive and overly burdensome. The Single Lot Policy,
  and the requirement that existing systems meet the requirements that were in
  effect at the time of initial installation, were provided as examples of regulations
  that impose unreasonable economic hardships on owners of liquid waste systems.
   NMED agrees.
- There was strong support for NMED's proposal of moving from the historical one-size-fits-all set of regulations, to regulations that are more specific to the hydrogeologic conditions of specific areas. NMED is going to proceed with its proposal.

<u>Scope</u> – There was mixed reaction to the idea of raising the 2,000 gpd limit in the scope of the regulations to 5,000 gpd. While the majority of comments supported the idea, some felt that discharges of this magnitude should remain under the authority of WQCC regulations. Some suggested that, if the limit is raised, advanced treatment should be required for discharges greater than 2,000 gpd, and that NMED staff should receive

additional training on advanced treatment. Additionally, the question of whether designing a greater than 2,000 gpd system is within the practice of engineering was raised. The Groundwater Quality Bureau noted that some of the permitted facilities in this discharge range have contaminated groundwater in excess of standards, and that transfer of these facilities to the Liquid Waste Program would remove these facilities from the authority of the WQCC abatement regulations. NMED is not going to propose to increase the scope of the regulations to 5,000 gpd at this time.

<u>Single Lot Policy</u> – There is substantial dissatisfaction with this policy. The public has provided examples of how the application of this policy does not serve its original purpose of protecting groundwater from one or more large, but less than 2,000 gpd, systems located in close proximity to each other. Re-platting lots to accommodate the policy was identified as a book-keeping exercise that does not change the physical characteristics of the wastewater discharge, or of the site, and provides no additional groundwater protection. **NMED agrees, and is drafting a revised Single Lot Policy with the Groundwater Bureau.** 

<u>Definition of "approved"</u> – A number of Liquid Waste Permits were given approval for construction, but were never granted final approval for operation. These systems typically were not inspected by NMED either because department inspectors were unavailable at the time of completion, or because the installer failed to call for an inspection. The draft amendment to the definition of "approved" would have the effect of invalidating permits for a large number of existing systems. **NMED does not believe it is fair to the owners of these systems, many of whom did not own the system at the time of construction, to invalidate the permits years after installation. NMED is drafting a procedure for granting operational approval for existing systems in this category.** 

<u>Definition of "irrigation"</u> – An installer noted that the proposed definition may conflict with provisions in the Uniform Plumbing Code. (NMED is looking into this issue.)

<u>Hydrogeologic Vulnerability Mapping</u> – This proposed regulation was generally well received. Many stakeholders agreed with NMED's position that the less than 30% gravel requirement (703.I) and lot size requirements (301) should be adjusted to reflect hydrogeologic sensitivity in some areas of the state.

- It was suggested that the area west of Alamogordo, where groundwater TDS naturally exceeds 10,000 mg/L, should be immediately exempted from the lot size requirements. **NMED agrees.**
- It was suggested that areas on the mountain slopes in Angel Fire, with clay soil and/or deep groundwater, should be immediately exempted from the lot size requirements. **NMED agrees.**
- There seemed to be general consensus that, if the minimum lot size is lowered in areas with low groundwater vulnerability, it should not be set smaller than ½ acre. NMED agrees. Concerns were raised, however, that ½ acre lots may not have enough suitable area to designate for the 50% drainfield replacement area

- required by 201.H. Please see the comment regarding regulation 201.H in the Drainfield Issues section below.
- One member of the public suggested that the proposed depth to groundwater requirement of 400 to 600 feet be replaced with language requiring 100 feet of vadose zone (which would mean a 100 foot depth to groundwater). NMED disagrees. A depth to groundwater of 100 feet is well within the range that ½ acre lots have caused widespread groundwater contamination.

## **Qualification Requirements**

- Homeowner Installations Several people recommended that homeowner installations be outlawed, while others suggested that the qualification requirements for homeowners be raised. The qualifications for homeowner installation were just raised by the EIB in amendments to 904 that became effective on November 21, 2011.
- Installer Specialist This proposed regulation is being well received by many contractors who would like to see it implemented. Concerns have been raised, however, that the privilege of self inspections could be abused since the installer and inspector would be the same entity. One contractor alleged that approximately 95% of the systems being installed today do not comply with the regulation and that the contracting industry lacks sufficient training and honesty to allow them to perform self inspections. NMED is unaware of any data to support the assertion that 95% of systems now being installed do not comply with the regulations. While there would be potential for abuse, NMED believes that the Installer Specialist provision, if implemented, would result in a net increase in compliance.
- Factory Certification for MSPs Concerns were expressed that regulation 903.B, requiring that maintenance service providers be factory certified, restricts free-market competition and enables monopolies and price gouging. An analogy was made to motor vehicle laws that require automobile owners to maintain their vehicles in safe working condition, but do not require that maintenance be provided only by factory certified mechanics. It was recommended that the requirement for factory certification of MSP's be repealed. NMED agrees. It should be noted that NSF requires that two years of service be included in the purchase price for advanced treatment systems. NMED is investigating whether MSPs may have been charging clients for service calls that were already paid for in the purchase price.
- <u>Generic MSP</u> Several stakeholders suggested that qualifications for a generic maintenance service provider be established. **NMED agrees.**
- <u>Inspector Qualifications</u> One homeowner felt that, due to potential conflicts of interest, only certified government employees should be authorized to perform inspections. In an ideal world, this idea might be practical. NMED, however, does not have sufficient funding and staff to assume the responsibility for all inspections.
- <u>Approved Training</u> One installer commented that the list of educational curricula currently approved by NMED should not be allowed for qualification as

an Installer Specialist on the basis that the training is not specific enough to installing. NMED disagrees. Much of the approved training is relevant to site evaluation, design and installation. This installer also pointed out that NMED had taken the position that the former Education Steering Committee was illegal, and raised questions as to the legality of NMED's approval of educational curricula that had been recommended by the Committee. NMED disagrees. The legality of the Education Steering Committee had no bearing on the quality and usefulness of the curricula that were reviewed by the Committee, which served only to make recommendations, and on the approval of the curricula by the NMED Secretary.

# **Property Transfer Inspections**

- There is strong support from the industry to allow properly qualified third parties to inspect unpermitted systems. NMED agrees, and will propose amendments where third parties would be allowed to inspect unpermitted systems.
- Banks are not being required to do property transfer inspections on foreclosure sales, and this is not fair to other sellers who are required to do the inspections.
   NMED agrees, but this is an enforcement issue that does not require amendments to the regulations.
- It was suggested that real estate contracts also should be subject to property transfer inspections at the time the contract is signed. NMED agrees, and is drafting language to clarify this inspection requirement.
- Several realtors commented that the cost of pumping and inspection was
  exorbitant and burdensome for property sellers, especially in the current economic
  climate. It was suggested that property transfer inspections be valid for a longer
  period of time, ranging from 1 to 5 years, if the system has not been modified.
   NMED believes that 5 years is too long of a time to provide the intended
  buyer beware protection of the regulation.
- One installer suggested that only licensed contractors with NAWT training be allowed to perform property transfer inspections. The qualifications for third party inspectors were just amended by the EIB in amendments to 904 that became effective on November 21, 2011.
- One installer recommended that maintenance service providers for advanced treatment systems be notified in advance of property transfer inspections by other parties to prevent accidental damage to the systems. NMED agrees.

Existing Liquid Waste Systems – Regulations 201.L and 401.J.1 require that existing liquid waste systems meet the requirements that were in effect at the time of initial installation. Consequently, a number of properly functioning systems have had to be replaced due to non-conformance with whatever prescriptive regulations were in effect at the time of initial installation. These situations typically occur during property transfers, and the person selling the home, who is now saddled with the cost of replacing a properly functioning system, is quite often not the original owner who had the non-compliant system installed. It was recommended that such systems not have to be replaced if they

are, in fact, functioning properly and are not too close to water wells or water bodies. **NMED agrees, and will propose to amend the requirements for existing systems.** 

#### Tanks

- <u>Plastic Tanks</u> Several installers suggested that plastic tanks be outlawed, or that
  more stringent requirements be imposed on the installation and pumping of plastic
  tanks. <u>NMED disagrees</u>. <u>Plastic tanks are suitable when properly installed</u>,
  and some of the newer plastic tanks are considerably stronger than older
  models.
- <u>Concrete Strength</u> One installer suggested that the strength be increased to 4500 psi. **NMED** is looking into this recommendation.
- Vents One installer suggested that vents be required in septic tanks to control
  the accumulation of gasses that can damage concrete. NMED disagrees.
  Properly constructed septic tanks should vent to the atmosphere thru the
  building sewer system. Additionally, the vents could create odor issues and
  other problems in the backyards of homeowners.
- <u>Tank Inlets</u> Two installers suggested that inlets be required to be watertight, such as by requiring flexible boots as are now placed on the outlet side. <u>NMED</u> agrees.
- <u>Effluent Filters</u> One installer suggested that all filters have handles extended to within 6" of the top of the access riser. **NMED agrees.**
- <u>Access Risers</u> Two installers suggested that five gallon buckets, trash cans, rain barrels, metal drums, dry staked cinder blocks, and single walled pipe not be allowed to be used as access risers. **NMED agrees.**
- <u>Cesspools</u> One member of the public felt that cesspools should still be allowed if caliche or another low permeability layer existed between the bottom of the cesspool and groundwater. NMED disagrees on the basis that groundwater pollution is not the only potential hazard to public health and safety that cesspools pose. Cesspools can create hazards of entrapment, asphyxiation and drowning, and these hazards can increase as cesspools age and deteriorate. Additionally, cesspools allow untreated human waste to directly enter the soil, as opposed to the effluent that has undergone primary treatment as provided by a properly functioning septic system.
- Holding Tanks It was pointed out that the existing language of 809.A, 809.B and 809.O conflict with each other. Rule 809.A contains a residential-only provision, while the other rules mention commercial holding tanks. NMED agrees.

#### **Drainfield Issues**

<u>Tire Chips</u> – One installer reports that tire chips used as drainfield aggregate have floated up to the surface and that children have suffered puncture injuries from the steel threads. Consequently, he no longer installs tire-chip drainfields. NMED has asked the installer to provide documentation of the flotation incidents,

- including what kind of fabric or other cover was placed on top of the tire chips in the drain field.
- <u>Six-Foot Maximum Trench Depth</u> The scientific justification for the maximum trench depth of 6 feet in the existing regulation was questioned, especially if groundwater is deep. This requirement was identified as a one-size-fits-all rule that is not appropriate for the entire state. **NMED agrees, and is developing an amended rule.**
- <u>Low-Pressure Dosed Systems</u> Two installers recommended that section 808 be re-written. **NMED agrees, and is working with stakeholders to amend 808.**
- <u>Drainfield Sizing</u> One installer recommended that the 30% reduction for proprietary products be eliminated, and that 703.1 application rates be increased from 2.0 to 2.25 sqft/gal.day and 5.0 to 5.7 sqft/gal.day. An NMED inspector recommended that sizing requirements for clay soils were too cost prohibitive and should be reduced. The 30% reduction rule and application rates were adopted as regulations after extensive review and discussions with experts. Any amendments to these regulations should have a solid scientific basis.
- Replacement Area Requirement The enforceability of the requirement for a 50% drainfield replacement area (201.H) was questioned. Many homeowners are unaware of such designated areas, and there is no practical way to prevent local officials from issuing building permits for the designated area. It was suggested that a drainfield replacement area is a good idea, but should not be a permitting requirement. NMED agrees, and will propose to delete this requirement.
- Flood Irrigation Setback Requirements Two installers commented that, while installing drainfields outside of irrigated areas is preferable, there is sometimes no other place to install the drainfield at some sites. Both installers believed that provisions should be written into the regulations whereby drainfields can be installed in irrigated areas, with protection from percolating irrigation water, when necessary. NMED does not understand why the existing variance option is not practical for these rare situations.
- <u>Drainfields Under Paved or Covered Areas</u> Similar to the issue of drainfields in irrigated areas, one installer pointed out that drainfields sometimes have to be installed under parking lots or other paved or covered areas. It was suggested that the regulations allow this with an increase in size to compensate for the lack of expected evapotranspiration. NMED does not understand why the existing variance option is not practical for these rare situations. Additionally, the prohibition against constructing drainfields under paved areas is contained in the Uniform Plumbing Code (UPC), and this could create problems for licensed contractors who must comply with UPC.

#### **Advanced Treatment**

 <u>Cost of Advanced Treatment Technology</u> – Several stakeholders identified the need for more affordable technology for advanced wastewater treatment. <u>NMED</u> agrees, but is unable to control free-market prices or to develop and market technology of its own.

- <u>RV Waste</u> There is support for exempting homeowners, who have a single RV for occasional use, from the pre-treatment requirements. <u>NMED agrees</u>, and will propose such an exemption. An RV park owner requested that NMED administer the requirement for pre-treatment of this high-strength waste consistently, and that the department issue guidance on what options are available to small RV park owners to provide pre-treatment. <u>NMED agrees</u>, and is developing such guidance.
- <u>High-Strength Waste</u> Several stakeholders identified the need to address high-strength waste. One installer suggested that liquid waste systems treat fast-food waste to less than 100 mg/L BOD and less than 15 mg/L oil and grease prior to discharge to the soil treatment unit. NMED agrees that treatment requirements for high-strength waste need to be clarified, and will ask the WTAC to put this issue on their agenda for a future meeting.

## <u>Split-Flow (Segregated-Waste) Systems</u> –

- One installer provided a technical paper written by Dr. Robert L. Siegrist in 1977 that specifically discussed the suitability of using of use of evapotranspiration (ET) systems to dispose of segregated toilet waste that has undergone sedimentation. The installer proposed amendments to 814 to allow the use of ET systems to dispose of toilet waste in split-flow systems. NMED agrees, and will incorporate the suggested amendments into its revised petition.
- Another installer questioned the proposed language that did not require primary treatment of gray water prior to subsurface discharge. The gray-water statute 74-6-4.L NMSA, and regulation 810, allow gray water to be discharged directly into soil without any treatment. The imposition of treatment requirements for these gray water discharges would need to have a solid scientific basis, and would require amendment of the statute as wells as the regulations. Regulation 811, however, for gray water flows larger than 250 gpd, does require "a treatment unit".

<u>Composting Toilets</u> – One member of the public would like to see the rules regarding composting toilets relaxed to encourage greater use of this technology. **NMED agrees, and has already proposed such amendments in its April 2011 petition.** 

<u>Grease Traps</u> – One installer suggested that grease traps be inspected by NMED, and that standards and design requirements be established.

#### Design Flow

- There is unanimous agreement that existing definition of "bedroom" which is
  used to calculate design flow is ambiguous and needs to be clarified. NMED
  agrees, and will propose clarifying language.
- One installer recommended that design flow assumptions not be amended to avoid further inconsistency with the Uniform Plumbing Code and to avoid organic overloading of drainfields. This is a topic that should be discussed

further. The current wastewater design flow assumptions specified in the regulations are believed to be larger than what typical households actually discharge. This is due to the installation of water conserving appliances and fixtures and due to water conservation practices.

One member of the public suggested that design flow be based on actual residential water usage, rather than on the number of bedrooms in the house.
 NMED disagrees. Occupancy and actual residential water usage can change over time. Using bedrooms to calculate design flow, while not a perfect method, is the only practical way to issue permits.

<u>Animal Waste</u> – It was suggested that kennel, veterinary and other animal waste should not be excluded from liquid waste systems, but that design flow for animal waste facilities need to be reviewed. **NMED agrees.** 

"Completely Dimensioned" Site Plans — One installer would like to see this requirement clarified to be clear that survey-accurate plans are not required. NMED believes the existing language is clear, and does not require survey-accurate site plans unless needed for a specific setback issue.

100-Foot Setback from Drainfield to Private Domestic Well – One installer has suggested that this setback be reduced since some other states require less than 100 feet. **NMED** disagrees, and is unaware of any scientific justification for replacing the existing one-size-fits-all rule with another one-size-fits-all rule.

Permit Review Deadline — One installer has suggested that the deadline for NMED action on a conventional permit application be reduced from 10 working days to 5 working days. NMED field staff endeavor to act on permits as soon as possible, typically well within the 10 working-day deadline. Given the hiring freeze and current vacancy rates, however, NMED does not support reducing the regulatory deadline from 10 to 5 days.

#### Enforcement

- The industry wants to see more enforcement by CID and NMED against
  unlicensed contractors, and against licensed contractors who violate the Liquid
  Waste Regulations. Specific concern was expressed that persons who have the
  NAWT inspector certification, but who do not hold a valid and appropriate CID
  license, are performing unlicensed construction and repair work. NMED agrees.
- Increased enforcement was requested to control the proliferation of illegal unpermitted systems being installed by homeowners and persons renting lots for RV's and mobile homes. **NMED agrees.**
- One installer suggested that Notices of Violation (NOV) be appealable. NMED disagrees. A NOV is a warning that has no legal status. Creating an appeal mechanism would be costly and unnecessary.

<u>Connections to Public Sewer</u> – One installer suggested language that would make 201.E consistent with the Uniform Plumbing Code regarding when connections to public sewer are required. The clarifying language would allow homeowners to keep using their septic systems in some cases. The EIB cannot promulgate regulations that will override ordinances adopted by local sewer authorities.

<u>Wastewater Technical Advisory Committee (WTAC)</u> – One installer suggested that technical people should be appointed to the WTAC. The WTAC membership is prescribed by statute, and the existing language is not clear with regard to expertise in the field of small onsite wastewater systems versus larger centralized wastewater systems.

#### Public Funding for Wastewater Infrastructure

- Public funding has long been made available through grants and loans, pursuant to the federal Clean Water Act, for example, to improve public wastewater infrastructure. Persons who live in houses served by onsite wastewater systems pay taxes, but get no government benefits in the way of improvements to wastewater infrastructure. It was suggested that the government establish a program to provide taxpayer-funded assistance to households that use onsite wastewater systems. This is an issue that has been recognized by both homeowners who utilize onsite wastewater systems, and by the onsite wastewater industry, throughout the United States for many years. Changing the paradigm of public funding for wastewater infrastructure will require legislation at both the national and state levels. This suggestion will be forwarded to the NMED Construction Programs Bureau.
- It was also suggested that incentives be made available for the extension of public sewerage service into areas served by septic systems when the public wastewater treatment plants have unused capacity. This suggestion will be forwarded to the NMED Construction Programs Bureau.